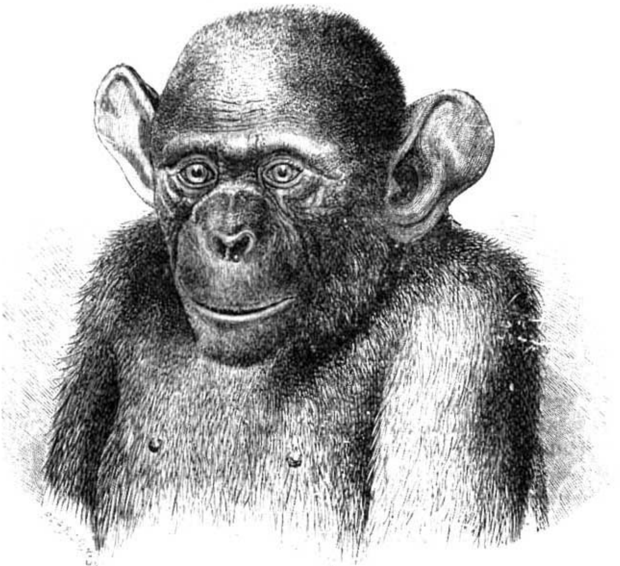
Mr. F. J. Aldridge, F.Z.S., by whom it was brought from Sierra Leone. This specimen is of about the same size and age as the young Bald-headed Chimpanzee, and enables an easy comparison to be made between the two species. Looking first at *A. calvus*, we find the skin of the head, face, ears, and limbs of a dark brownish clay colour, which will, no doubt, get blacker as the animal becomes adult. The ears are perfectly naked, and of large size, and stand out at nearly right angles from the head. The top of the head is very scantily covered with short blackish hair. The whole of the body and limbs are also very thinly covered with hair, especially the abdomen.

When we turn to the young specimen of *A. troglodytes*, we find the upper part of the face and the brows of a dirty flesh colour. Between the eyes, above the nostrils, and passing down the cheeks, it is black. The nose and muzzle are of a dirty flesh colour. The chin and upper lip are covered with longish white hair. The inside of the ears is nearly black. The forehead, cheeks, and the whole of the body are covered with long, harsh, black hair. The colour of the hands and feet are of a brownish clay colour, much the same as those of *A. calvus*.



The rump above and below the anus is covered with longish white hair.

With regard to the size of these two animals, the length of limbs, and other measurements, they are nearly equal. It is probable that *A. troglodytes* is a trifle older than the new specimen of *A. calvus*.

It may be of interest to mention that, as Mr. Bartlett informs me, the young *A. calvus* will kill and eat sparrows in the same manner as "Sally" kills and eats pigeons, whereas the common chimpanzee will not touch any food of this kind.

It must be admitted, however, that the specific term *calvus*, applied to "Sally" and her "younger sister," can only be considered as provisional. When these specimens die, which, we trust, will not be till some distant period, they must be compared with the example of the *Troglodytes calvus* of Du Chaillu, which is now in the British Museum. On the same occasion the skulls of these specimens can be compared with the descriptions and figures given by Duvernoy of his *Troglodytes tschego*. Until this can be done, it is impossible to say decisively whether these two specimens belong to one of the supposed species already described, or should receive a new name.

Finally, I may add that the Ape House in the Society's Gardens, besides these two chimpanzees, contains at the present time a young female Orang (*Simia satyrus*), received on deposit, and a specimen of the Silvery Gibbon (*Hylobates leuciscus*), lately presented by Captain D. L. Delacherois; so that all the three known genera of anthropoid apes may be now seen represented by living specimens.

P. L. S.

NOTES.

A MOVEMENT has been started in Norway for the despatch in the summer of 1890 of an Expedition which would try to reach the North Pole, and it is proposed that the leadership shall be offered to Dr. Nansen. Those who are arranging the plans maintain that no other country could furnish such a crew of experienced and hardy ice men and Arctic travellers as Norway, and that a winter or two in the Arctic regions would affect these men very little. The intention is that an attempt shall be made to reach the Pole by way of Franz Josef's Land, a route advocated by the most experienced Norwegian Arctic travellers as well as by several well-known men of science who have studied the problem. *Ski*, which have played such a prominent part in the Nordenskiöld and Nansen Greenland expeditions, would no doubt again be of great service.

THE Royal Academy of Sciences of Turin, in accordance with the last will and testament of Dr. Cesare Alessandro Bressa, and in conformity with the programme published on December 7, 1876, announces that the term for competition for scientific works and discoveries made in the years 1885-88, to which only Italian authors and inventors were entitled, was closed on December 31, 1888. The Academy now gives notice that from January 1, 1887, the new term for competition for the seventh Bressa Prize has begun, to which, according to the testator's will, scientific men and inventors of all nations will be admitted. A prize will therefore be given to the scientific author or inventor, whatever be his nationality, who during the years 1887-90, according to the judgment of the Royal Academy of Sciences of Turin, shall have made the most important and useful discovery, or published the most valuable work on any of the following subjects—physical and experimental science, natural history, mathematics, chemistry, physiology, pathology, geology, history, geography, and statistics. The term will be closed at the end of December 1890. The value of the prize amounts to 12,000 Italian lire. The prize will in no case be given to any of the national members of the Academy of Turin, resident or non-resident.

THE Board of Electors to the Linacre Professorship of Human and Comparative Anatomy at Oxford have, on account of Prof. Moseley's continued illness, nominated Mr. W. Hatchett Jackson, M.A., F.L.S., to serve as Deputy Professor.

SIR HENRY ROSCOE has been elected to represent the Royal Society on the governing body of Eton College.

WE regret to announce the death of Mrs. Merrifield, whose name as a writer on Algæ and kindred subjects is well known to our readers. She died on January 4, in her eighty-fifth year. To-day we print an article by Mrs. Merrifield on some recent works on Algæ. We learn that she was very ill when this article was written, but it was not thought that the end was so near.

THE annual general meeting of the Royal Meteorological Society will be held at 25 Great George Street, Westminster, on Wednesday, the 16th instant, at 7.15 p.m., when the report of the Council will be read, the election of officers and Council for the ensuing year will take place, and the President (Dr. W. Marcet, F.R.S.) will deliver an address on "Fogs," which will be illustrated by a number of lantern slides.

In the January number of the *Kew Bulletin* there is a most interesting paper on the coca-plant, to which considerable attention has lately been devoted, mainly because of the valuable properties ascribed to one of its alkaloids, called cocaine, as a local anæsthetic. It appears that since the discovery of the anæsthetic properties of cocaine the demand for coca-leaves in South America has considerably increased for export purposes. A distinct loss in the alkaloids generally, as well as in cocaine, has been noticed during the transit of leaves to this country; and latterly, in consequence, it has become the practice to extract the alkaloids from the leaves in South America, and export to the United States and Europe a crude preparation, which is largely taken up by manufacturers of cocaine. The demand for coca-leaves has, therefore, fallen off, and the writer of the paper thinks that the cultivation of the coca-plant in our tropical colonies will probably never assume large proportions. South America, he says, is able without further extension of cultivation to produce such enormous quantities of coca-leaves that the one-eightieth part would be sufficient to swamp the cocaine markets of the whole world. The other subjects dealt with in this number are beetles destructive to rice-crops in Burmah, fibre from Lagos, yam bean, Schweinfurth's method for preserving plants, a starch-yielding bromeliad, and the fruits of Mysore.

The Swedish Superintendent of Fisheries, Dr. F. Trybom, has, at the instance of the Swedish Government, been engaged during the past autumn in making a series of scientific experiments on the coast of Sweden for the purpose of studying the condition of the herring when undisturbed. He brought back with him newly-hatched herring-fry and herring-spawn ready to be hatched. The bottom on which these were found consisted of stones, gravel, and shells; the depth of water was about 20 metres, and the temperature of water at the bottom about 11° C. The results of these experiments are not yet known, but a Swedish paper says that they are such as to encourage the Government to permit Dr. Trybom to continue next autumn his inquiries into the development, habits, and habitats of the most important fish on the Swedish coasts.

Dr. Kolthoff, the well-known Swedish naturalist, is arranging an interesting zoological museum at the Upsala University, being a complete representation of the fauna of Scandinavia, with nests, representations of lairs, &c. This is the only museum of the kind in Sweden.

Gaseous fluoride of methyl has been obtained in the pure state, and its density determined, by MM. Moissan and Meslans. The existence of this gas was announced some years ago by MM. Dumas and Peligot, who describe a mode of preparation by the action of methyl sulphuric acid upon fluoride of potassium. The gas obtained, however, by this method is now shown to be a mixture of oxide and fluoride of methyl, and a new method has been developed by means of which it is obtained sufficiently pure for accurate analysis. The reaction is analogous to the one recently described for the preparation of ethyl fluoride, methyl iodide being allowed to act upon fluoride of silver. A regular evolution of gas commences at once in the cold, and the gaseous mixture, consisting of methyl fluoride and vapour of methyl iodide, is led first through a spiral leaden condenser cooled to − 50° C., where most of the latter substance is condensed, and afterwards through a couple of glass tubes heated to 90° and filled with fresh fluoride of silver, which removes the last traces of methyl iodide. This reaction is found to be the only one yet known which gives the gas in anything like a state of purity. MM. Moissan and Meslans have, however, also obtained it in a lesser degree of purity by the action of pentafluoride of phosphorus upon methyl alcohol. The fluoride of methyl obtained as above possesses a normal density corresponding to the formula CH_3F. It liquefies at ordinary temperatures when submitted to a pressure of thirty-two atmospheres in Cailletet's apparatus. It is slightly soluble in water, 100 c.c. at 18° dissolving about 193 c.c. of the gas; it dissolves very much more readily in methyl iodide or methyl alcohol. Perhaps the most interesting fact about it is its great stability, for, even on heating in sealed tubes at 120° in presence of water or a dilute solution of potash, it saponifies only with great difficulty.

Besides the above described fluoride of methyl, another entirely new one, isobutyl fluoride, C_4H_9F, has been prepared by acting in a similar manner upon silver fluoride with isobutyl iodide. One scarcely knows whether to describe this new fluoride as a gas or a liquid. As a matter of fact, at this time of the year it is a colourless and very mobile liquid, but in summer weather would be a gas, inasmuch as its boiling-point is just about the temperature of an ordinary room, 16° C. The reaction between isobutyl iodide and silver fluoride commences vigorously in the cold, but the mixture requires warming to 50° in order to obtain a theoretical yield. In the form of a gas it burns on ignition, with deposition of carbon and formation of clouds of hydrofluoric acid. The liquid, when pure, is singularly incapable of attacking glass. It is interesting that M. Moissan has now succeeded in preparing, by means of the silver fluoride reaction with the iodides of the corresponding organic radicals, the fluorides of methyl, ethyl, propyl, and butyl, finding them in each case remarkably more stable than the analogous chlorine compounds.

In the latest volume of the American Consular Reports it is stated that Switzerland has followed other civilized countries in adopting a law for the protection of inventions. This law cannot have effect until it has been decided whether 30,000 voters will petition against it, in which case it must be submitted to the people. The American Consul states that it contains several new and interesting provisions, and he gives, in his Report, the text of the law. It is remarkable that only material objects, and not processes, are protected. This peculiarity is said to be due to the efforts of manufacturers of aniline colours and chemicals, who would be injuriously affected by a law which would protect arts as well as tools and machines. The duration of a patent is to be fifteen years; a fixed fee of 20 francs must be paid for the first year, and a progressive annual fee, which amounts in the fifteenth year to 160 francs.

A severe shock of earthquake, accompanied by loud subterranean noises, occurred on December 26 at a part of the Vogtland; it was also felt at Röttis, Lengenfeld, Plauen, and Auerbach. Shocks also occurred at Messina, Jagonegro, and Castroreale on the same day, but no serious damage was done.

The anomalies of weather felt in October and November last in Western Europe were also felt in Russia and Central Asia. From October 27 to November 13, at several places in Northernt, Eastern, and Southern Russia, the daily averages were below the normal temperatures of the same days by no less than from 16° to 19° C. On October 28, it was freezing at Tashkent early in the morning. Most Russian rivers were covered with ice from seven to twenty-five days earlier than they have been frozen on the average for a long series of years. Two great waves of cold could be distinguished, both spreading from the north-west to the south-east. In the second part of November there was a sudden return of warm weather, and the Russian rivers were opened again. Throughout this disturbed period the barometer gave valuable indications as to the movements of the cyclones and anticyclones. The centre of the latter moved as follows: on November 5, it was at Pinsk (782 mm. of barometric pressure, reduced to the sea-level); next day it was at Kherson (782 mm.); on November 5, at Pyatigorsk (781 mm.); and next day, at Erivan in Armenia (779 mm.) The height reached by the barometer at Pyatigorsk was greater than it had ever before been known to be. As to the low pressures of the air, which soon followed the high pressures, they were not less remarkable. Thus, a pressure as low as 723 mm. was measured at Christiansund on November 19; 716 mm. at Nikolaistad (Wasa), and 720 mm. at Kuopio, on November 20; and 721 mm. at Povyenets, in Olonets, on November 21. So low a pressure as 716 mm. (reduced to the sea-level) is of exceedingly rare occurrence. The next minimum of pressure came on November 25, and it was accompanied by frightful storms which blew over Central Russia. The barometer did not fall so low as during the preceding days, but the displacement of the minimum was characterized by a further decrease of pressure in proportion as the centre of the depression advanced towards Central Russia. Like cases were observed also in 1881 and 1886, but they are rare on the whole. On November 25, the barometer at Moscow was as low as 723·8 mm.

AT the meeting of the French Meteorological Society, on December 4 last, the President stated that the Minister of Commerce and Industry had appointed a Committee of Organization for the proposed Meteorological Congress to be held in 1889. The Committee met on November 24, and elected M. Renou as President, and M. L. Teisserenc de Bort as General Secretary. M. Moureau, Secretary of the Society, presented the results of magnetic observations made by him in the western basin of the Mediterranean by direction of the Minister of Public Instruction. M. Renou presented a Report by M. Cœurdevache on the relations of temperature and wind direction at Clermont and the summit of the Puys-de-Dôme during winter. He pointed out that the isotherms at the summit of the mountain are not parallel to those in the plain, the latter being influenced by various agencies, such as sea or mountain. M. L. de Bort stated that it was proposed to hold a meeting of meteorologists at Hamburg, with the view of preparing the basis of an understanding as to the classification of clouds. He thought that "nimbus" and "cumulus," especially, were a source of confusion in cloud observations, and that the height of clouds was much exaggerated in rainy weather. It had been observed that the Eiffel Tower, which now reaches over 670 feet, was frequently enveloped in cloud at a height of about 520 feet. M. Lemoine made some remarks upon the bad effect of the low summer temperatures upon the grape harvest, the first frosts occurring in many cases before the grapes had reached maturity.

THE volume of *Abhandlungen und Berichte des K. Zoologischen und Anthropologisch-Ethnographischen Museums zu Dresden* (Friedländer and Son, Berlin)—in which there is a German translation of Mrs. Nuttall's article on a relic of ancient Mexico (referred to in another column)—contains, in addition to this translation, some interesting and valuable papers. It opens with a full account, by Dr. A. B. Meyer, the editor, of certain new arrangements for the better protection and display of objects in the Zoological and Anthropological Museum of Dresden. The editor also gives a list of the Reptilia and Batrachia collected by him in the East Indian Archipelago in the years 1870-73. There are papers on mammals from the East Indian Archipelago, by Dr. B. Hoffmann; on the Indian-Australian Myriopoda, by Dr. Erich Haase; and on other subjects. The volume is carefully illustrated.

PROF. R. MELDOLA, F.R.S., has in the press a work on "The Chemistry of Photography," which will shortly be issued by Messrs. Macmillan and Co., as one of the volumes of "Nature Series." The work consists of a course of lectures delivered last year at the Finsbury Technical College. The chief object kept in view by the author is the necessity for the full recognition of photographic chemistry as a branch of applied science in technical Colleges. Each lecture is followed by an appendix containing hints for the experimental illustration of the subject by means of lecture demonstrations, many of which are new, and all of which have been revised with a view of enabling lecturers to demonstrate the chemical principles of photography before an audience in a simple manner. The mode of treatment adopted will, it is anticipated, be found of use also to practical photographers, by enabling them to obtain a concise and comprehensive view of the scientific principles of their art.

MESSRS. CROSBY LOCKWOOD AND SON have issued a waistcoat-pocket book abounding in tables and concise information on a variety of topics connected with rural affairs, revised by Prof. Fream, of Downton Agricultural College. The title is "Tables, Memoranda, and Calculated Results for Farmers, Graziers, Agricultural Students, Surveyors, Land Agents, Auctioneers, &c.," by Sidney Francis. The contents are trustworthy and useful, and are readily found by means of a detailed index. It would be difficult to enumerate even the principal subjects dealt with in this cubic inch of printed matter; but we may say that, whether the inquirer opens it in order to find the composition of foods, fertilizers, or crops; the rules of measurement for animals, hay-stacks, timber, or water-courses; the strengths of materials; the advantages of water, steam, or horse power; the value of tillages, of tithes, or of woodlands; particulars as to piece-work, or costs of embanking, excavating, &c.,—he will find statistics on all these, and countless other subjects.

MESSRS. CROSBY LOCKWOOD AND SON have published a second edition of "The Blowpipe in Chemistry, Mineralogy, and Geology," by Lieut.-Colonel W. A. Ross, R.A. In this edition the work has been revised and enlarged. It contains 120 illustrations by the author.

WE have received "The Mining Manual for 1888," compiled by Mr. Walter R. Skinner. The object of this work is to give the fullest possible information with regard to mining companies. The compiler mentions that, without reckoning South African mines, he has referred to 900 companies. Owing to the growing importance of mining at the Cape, Natal, and the Transvaal, a separate section on South African mines has been added.

IN "The Floral King; a Life of Linnæus" (W. H. Allen and Co.), Mr. Albert Albery has presented a very good sketch of the career of the great Swedish botanist. It includes a number of interesting extracts from the late Dr. Ährling's selection from the correspondence of Linnæus.

MR. JOHN MURRAY has issued an interesting little book on "The Invisible Powers of Nature," by E. M. Caillard. Its object is to create in its readers a sufficient interest in physical science to lead them to the study of more advanced works on the subject.

A SECOND edition of "Nature's Fairy-Land," by H. W. S. Worsley-Benison (Elliot Stock), has just been published.

MESSRS. E. A. PETHERICK AND CO. have published "A Classified List" of Mr. S. W. Silver's collection of New Zealand birds at the Manor House, Letcomb Regis. Sir Walter Buller has added short descriptive notes for the information of visitors. The value of the "List" is greatly increased by a number of woodcuts, most of which are borrowed from Sir Walter Buller's "Birds of New Zealand." Mr. Silver's collection consists of birds contained in twelve cases. Of these cases eight were on view in the New Zealand Court at the Colonial and Indian Exhibition in 1886. The four cases since added contain many of the rarer species of New Zealand birds.

IN the current number of the *Mineralogical Magazine and Journal of the Mineralogical Society* there is a valuable article, by Mr. H. A. Miers, entitled "Contributions to the Study of Pyrargyrite and Proustite." The paper, as the author explains, is the result of a study of the rich collection of red silvers in the British Museum (Natural History). The analyses have been made by Mr. G. T. Prior, and the specific gravity determinations in most instances by both Mr. Prior and Mr. Miers himself. The number also includes a paper on a peculiar variety of hornblende from Mynydd Mawr, Carnarvonshire, and a note on picrite from the Liskeard district, both by Prof. Bonney; a paper on dufrenite from Cornwall, by Prof. Kinch; and notes on some minerals from the Lizard, by Mr. J. J. H. Teall.

THE following figures show the devastations caused in the Hungarian vineyards by the Phylloxera. In 1881, 50 vineyards were infected; this number rose in 1882 to 79, in 1883 to 107, in 1884 to 237, in 1885 to 388, in 1886 to 582, and in 1887 to 811. In 1887, 132,352 acres of land were infected, the area of all the Hungarian vineyards together being 740,000 acres.

A LIST of the minerals of New York County, by B. B. Chamberlain, appears in the Transactions of the New York Academy of Sciences, vol. vii. No. 7. This list has now been reprinted. The lists of Robinson and Cozzens numbered some thirty-five minerals. That of Mr. Bailey, in 1865, embraced about forty-five titles. Mr. Chamberlain, omitting some of the less important varieties, has placed on record about a hundred names. The majority of the specimens described are from his own collection.

IN an interesting paper on the decay of the building-stones of New York City, recently read before the New York Academy of Sciences, Mr. Alexis A. Julien says it is "pitiable" to see new buildings erected in soft and often untried varieties of stone covered with delicate carvings of foliage and flower garlands, which are almost certain to be nipped off by the frost before the second generation of the owner shall enter the house. Mr. Julien points out that many of the best building-stones of America have never been brought into New York. Among the examples he mentions are siliceous limestones of the highest promise of durability, allied to that employed in Salisbury Cathedral; refractory sandstones, like some of those of Ohio and other Western States, particularly fitted for introduction into business buildings in the "dry-goods district," storage houses, &c., where a fire-proof stone is needed; and highly siliceous varieties of Lower Silurian sandstones, such as occur near Lake Champlain, quartzitic and hard to work, like the Craigleith stone of Edinburgh, and possessing the valuable qualities of that fine stone, in resisting discoloration, notwithstanding its light colour, and in remarkable resistance to disintegration.

THE French *Revue des Colonies* reports that from a plant called *Kanaff*, which grows in the summer on the shores of the Caspian, M. O. Blakenbourg, a chemist, has obtained an admirable textile matter, which is soft, elastic, tough, and silky, and which can be bleached chemically without losing these properties. The resistance of this new material is said to be far greater than that of hemp, while its specific weight is much less.

PROF. HEYDECK, of Königsberg, has been lecturing on a pile dwelling, in the Szontag Lake, in East Prussia. Ten years ago, the lake was lowered a little more than a metre. The land thus gained was cultivated, and a pile dwelling was discovered. Many flint implements were found. There was only one bronze ornament, but articles of bone were numerous. There were also vessels of clay, of which nineteen were quite uninjured.

IN our review of "The Orchids of the Cape Peninsula," by Harry Bolus, F.L.S., last week, it was noted that the omission of the publisher's name might cause inconvenience to persons wishing to purchase copies. Messrs. Wesley and Son write to us that some copies of the work have been sent to them for sale.

THE additions to the Zoological Society's Gardens during the past week include an African Zebu (*Bos indicus* ♀) from East Africa, presented by Mr. W. Mackinnon, F.Z.S.; a Coot (*Fulica atra*), British, presented by Mr. J. Cutting; a Greek Partridge (*Caccabis saxatilis*) from Bussorah, presented by Mr. Harold Hanaeur, F.Z.S.; two Red and Yellow Macaws (*Ara chloroptera*) from South America, a Greater Sulphur-crested Cockatoo (*Cacatua galerita*), a Roseate Cockatoo (*Cacatua roseicapilla*) from Australia, presented by Lady Meux; a —— Guinea Fowl (*Numida* ——) from East Africa, presented by Mr. Percy C. Reid; three Ruffs (*Machetes pugnax*), two Snow Buntings (*Plectrophanes nivalis*), British, purchased; a Great Wallaroo (*Macropus robustus*), born in the Gardens.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1889 *JANUARY* 13-19.

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on January 13

Sun rises, 8h. 3m.; souths, 12h. 9m. 6·8s.; sets, 16h. 15m.: right asc. on meridian, 19h. 41·8m.; decl. 21° 24′ S. Sidereal Time at Sunset, 23h. 48m.

Moon (Full on January 17, 6h.) rises, 13h. 35m.; souths, 21h. 31m.; sets, 5h. 36m.*: right asc. on meridian, 5h. 5·2m.; decl. 19° 52′ N.

Planet.	Rises. h. m.	Souths. h. m.	Sets. h. m.	Right asc. and declination on meridian. h. m.	° ′
Mercury..	8 45	12 52	16 59	20 25·2	21 22 S.
Venus	9 52	15 5	20 18	22 37·8	9 58 S.
Mars	9 43	14 49	19 55	22 21·7	11 16 S.
Jupiter	6 11	10 7	14 3	17 39·3	23 0 S.
Saturn	18 25*	1 55	9 25	9 26·1	16 16 N.
Uranus	0 27	5 50	11 13	13 22·0	7 57 S.
Neptune..	12 34	20 17	4 0*	3 51·5	18 26 N.

* Indicates that the rising is that of the preceding evening and the setting that of the following morning.

Jan.

17 ... — ... Partial eclipse of the Moon: visible throughout the United Kingdom: first contact with shadow 3h. 59m.: middle of eclipse 5h. 30m.: last contact with shadow 7h. 0m. About two-thirds of the moon's diameter will be obscured.

18 ... 21 ... Saturn in conjunction with and 1° 20′ south of the Moon.

Variable Stars.

Star.	R.A. h. m.	Decl. ° ′			h. m.	
U Cephei	0 52·5	81 17 N.	Jan.	13,	21 33	*m*
			,,	18,	21 12	*m*
Algol	3 1·0	40 32 N.	,,	19,	2 28	*m*
λ Tauri	3 54·6	12 11 N.	,,	17,	3 34	*m*
ζ Geminorum	6 57·5	20 44 N.	,,	17,	23 0	*m*
R Canis Majoris	7 14·5	16 11 N.	,,	14,	0 41	*m*
			,,	15,	4 6	*m*
S Cancri	8 37·6	19 26 N.	,,	13,	20 51	*m*
T Virginis	12 8·9	5 25 S.	,,	14,		*M*
δ Libræ	14 55·1	8 5 S.	,,	15,	6 44	*m*
U Coronæ	15 13·7	32 3 N.	,,	18,	5 45	*m*
R Scorpii	16 11·0	22 40 S.	,,	16,		*M*
U Ophiuchi	17 10·9	1 20 N.	,,	16,	5 45	*m*
R Lyræ	18 52·0	43 48 N.	,,	18,		*M*
S Vulpeculæ	19 43·8	27 1 N.	,,	13,		*M*
R Sagittæ	20 9·0	16 23 N.	,,	17,		*m*
X Cygni	20 39·0	35 11 N.	,,	17,	21 0	*M*
T Vulpeculæ	20 46·8	27 50 N.	,,	13,	6 0	*M*
Y Cygni	20 47·6	34 14 N.	,,	13,	17 40	*m*
		and at intervals of			36 0	
δ Cephei	22 25·0	57 51 N.	Jan.	16,	5 0	*m*
			,,	17,	20 0	*M*

M signifies maximum; *m* minimum.

Meteor-Showers.

	R.A. °	Decl. °	
Near π Orionis	72	5 N.	
,, κ Cygni	295	53 N.	Slow, trained.